REMARKS

Claims 1-15 and 45-64 are pending. Applicants note with appreciation that Claims 8, 9 and 62 would be allowable if the objection is overcome.

The Present Office Action

Sections 1-6 of the present Office Action appear to be identical to the corresponding sections in the Office Action dated October 5, 2005. The only new section appears to be "Response to Amendment". Applicants respectfully disagree with the Examiner. To assist the Examiner, additional clarifications are provided in this response.

35 U.S.C. §102 (e) Rejection

Claims 1-5, 10, 12-15, 45, 46-59 and 64 are rejected under 35 U.S.C. 102(e) as allegedly being anticipated by Zang et al (US 2003/0207963 A1). The rejection is traversed.

Claim 1 is directed to non-aqueous electrophoretic capsules comprising a halogenated polymeric shell and an electrophoretic composition enclosed therein wherein said electrophoretic composition comprises charged pigment particles or pigment-containing microparticles dispersed in a dielectric solvent. Applicant is submitting herewith Exhibit 1, which is a drawing that depicts Claim 1, to assist the Examiner in understanding how the present invention is fundamentally different from Zang et al.

In this drawing, a non-aqueous electrophoretic capsule (A) comprise a halogenated polymeric shell (E) and an electrophoretic composition (B) enclosed within the halogenated polymeric shell (E). In the electrophoretic composition (B), charged pigment particles or pigment-containing microparticles (C) are dispersed in a dielectric solvent (D). The pigment-containing microparticles are microparticles with pigment particles encapsulated therein.

Zang et al, on the other hand, only disclose a component of the claim, that is, the pigment-containing microparticles (C). The pigment-containing microparticles (C) of Zang et al enclose pigment particles, but not a dielectric solvent.

In other words, the non-aqueous electrophoretic capsules (A) of the present invention act as display cells and are filled with an electrophoretic composition (B). Whereas the pigment-containing microparticles (C) of Zang et al are only part of the electrophoretic composition (B).

Paragraphs [0073]-[0077] of Zang et al disclose how the pigment-containing microparticles are prepared. The process involves an internal phase (see [0075]) and a continuous phase (see [0076]). The internal phase comprises pigment particles dispersed in a mixture of reactive monomers or oligomers and optionally a fugitive solvent. The continuous phase comprises a reactive protective colloid and a solvent which is incompatible with the internal phase. The solvent in the continuous phase may be a dielectric solvent. During microencapsulation of the pigment particles, the internal phase is emulsified into the continuous phase (see [0077]). As a result, a hard shell is formed around the pigment particles (see [0077]). The fugitive solvent, if present in the internal phase, evaporates (thus termed a "fugitive" solvent) and the internal phase solidifies. Although the solvent in the continuous phase may be a dielectric solvent, it is not enclosed in a hard shell. Therefore, Zang et al does not disclose a hard shell enclosing an electrophoretic composition (B), in which charged pigment particles or pigment-containing microparticles (C) are dispersed in a dielectric solvent (D).

Examiner's Response to Amendment

Applicants wish to point out that Applicants are not disputing that Zang et al disclose a dielectric solvent. However, Zang et al do not disclose a dielectric solvent enclosed within a halogenated polymeric shell (Claim 1).

Paragraph [0016] of Zang et al describes how an electrophoretic composition (B) is prepared. The pigment particles (C) in the form of a fine powder is added to a suitable dielectric solvent (D) and the resulting mixture is ball milled or attrited for several hours to break up the highly agglomerated dry pigment powder into primary particles. The paragraph does not disclose that C and D are enclosed within a hard shell.

Paragraph [0017] discloses how sedimentation or creaming of the pigment particles (C) in an electrophoretic composition (B) may be avoided by microencapsulating or coating the pigment particles with suitable polymers to match the specific gravity of the pigment particles to that of the dielectric solvent (D) in which the pigment particles are dispersed. This paragraph does not disclose that C and D are enclosed within a hard shell.

Paragraph [0059] discusses the continuous phase of Zang et al in which a reactive protective colloid is soluble or dispersible in a solvent. Paragraph [0060] discloses the structure of reactive protective colloids and a fluorinated polyether solvent which may be used as a

dielectric solvent in the continuous phase. The solvent in the continuous phase, as discussed above, is not enclosed in the hard shell of the pigment-containing microparticles.

Paragraph [0068] discusses the preparation of the reactive protective colloids and solvents suitable for the synthesis. This paragraph is irrelevant to the present invention.

Paragraph [0081] mentions a dielectric solvent (D) in the context of an electrophoretic composition (B), as it is clearly stated that "the pigments are encapsulated or coated with a polymeric material to match the density to that of the dielectric solvent". Paragraph [0082] also focuses on the electrophoretic composition (B) as encapsulated pigment particles are density matched to the dielectric solvent (D) in which the encapsulated pigment particles are dispersed. This paragraph does not disclose that C and D are enclosed within a hard shell.

The Abstract of Zang et al states the stabilizing effect of a reactive protective colloid on an electrophoretic composition (B) comprising a dielectric solvent (D).

The dielectric solvent of Claim 51 of Zang et al refers to a dielectric solvent (D) in an electrophoretic composition (B) (named as "electrophoretic suspension" in Claim 49).

In summary, Zang et al do not disclose non-aqueous electrophoretic capsules (A) which comprise a hard shell with an electrophoretic composition enclosed within. In other words, Zang et al do not disclose a hard shell enclosing a pigment-containing microparticle (C) **and** a dielectric solvent (D).

This discussion also applies to independent Claim 45 and claims dependent from Claims 1 and 45.

In the Office Action, the Examiner cites Figure 3 and Table 1 of Zang et al. Applicants respectfully submit that there is no Figure 3 or Table 1 in Zang et al.

35 U.S.C. §103 Rejection

Claims 6, 7, 60 and 61 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Zang et al in view of Rao et al (US Patent No. 6,372,838). The rejection is traversed because Zang is not a proper reference under 35 U.S.C.103(c)(1).

The subject matter of Zang et al only qualifies as prior art under 102(e) against the claimed invention. Because at the time this invention was made, the subject matter of Zang et al and the claimed invention were subject to an obligation of assignment to the same person, i.e.,

SiPix Imaging, Inc., Zang et al shall not preclude patentability of the claimed invention under 35 U.S.C.103(c)(1).

Claims 11 and 63 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Zang et al in view of Jacobson et al (US Patent No. 6,323,989). The rejection is traversed because Zang et al is not a proper reference under 35 U.S.C.103(c)(1).

Request for Interview

In the event that the Examiner does not find Applicants' argument persuasive or claims allowable, Applicants request that the Examiner grant Applicants a telephone interview to discuss the application.

CONCLUSION

Applicants believe that the application is now in good and proper condition for allowance. Early notification of allowance is earnestly solicited.

Respectfully submitted,

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Enclosure (Exhibit 1)

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